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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/585,129	05/31/2000	Scott T. Hughes	A0614	3846
35219 7590 09/08/2009 WESTERN DIGITAL TECHNOLOGIES, INC. ATTN: LESLEY NING 20511 LAKE FOREST DR. E-118G LAKE FOREST, CA 92630				
EXAMINER				
COPPOLA, JACOB C				
ART UNIT		PAPER NUMBER		
3621				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/585,129

Applicant(s)

HUGHES ET AL.

Examiner

JACOB C. COPPOLA

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/IC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Continued Examination under 37 C.F.R. §1.114

1. A request for continued examination (“RCE”) under 37 C.F.R. §1.114, including the fee set forth in 37 C.F.R. §1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 C.F.R. §1.114, and the fee set forth in 37 C.F.R. §1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 C.F.R. §1.114. Applicants’ submission filed on 11 June 2009 has been entered.

Acknowledgements

2. This action is in reply to the RCE, the ‘Amendments to the Claims’ filed on 11 June 2009 (“09 Jun Amendments”), and the ‘Remarks’ filed on 11 June 2009 (“09 Jun Remarks”).
3. Claims 1-3, 5-8, and 10 are currently pending and have been examined.
4. This Office Action is given Paper No. 20090901. This Paper No. is for reference purposes only.

Claim Rejections - 35 USC §101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-3, 5-8, and 10 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Regarding Claims 1-3 and 5

7. Based on Supreme Court precedent¹ and recent Federal Circuit decisions, a §101 patent eligible process must (1) be tied to a particular machine (or apparatus), or (2) transform a particular article to a different state or thing. See *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008)(en banc). This is the Machine-or-Transformation Test (“M-T Test”).
8. To meet prong (1), the method step should positively recite a machine to which it is tied. Alternatively or to meet prong (2), the method step should positively recite the material that is being changed to a different state or positively recite the subject matter that is being transformed. For example, a method claim that would *not* qualify as a patent eligible process because it fails both prongs of the M-T Test would be a claim that recites purely mental steps.
9. In this particular case, the process claims fail prong (1) because the method steps are not tied to a specific machine. In other words, none of the method steps positively recite a machine that performs the method step.
10. Finally, the Examiner notes that the claims fail prong (2) because the method steps do not transform the underlying subject matter to a different state or thing.

Regarding Claims 6-8 and 10

11. These claims recite computer programs only. “Computer programs claimed as computer listings per se, *i.e.*, the descriptions or expressions of the programs, are not physical ‘things.’

¹ See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

They are neither computer components nor statutory processes, as they are not ‘acts’ being performed.” MPEP §2106.01 I. Because the claims recite only abstractions that are neither “things” nor “acts,” the claims are not within one of the four statutory classes of invention².

12. Additionally, Applicants’ original specification expressly states “[t]he control module 304, the formatting module 308, the collection module 312, the identification database 316, and the advertisement database 320 comprise executable code that may contain procedures, definitional statements, and macros” (Specification, p. 6, l. 18-20). Because the claimed modules and databases may be interpreted as software only, the claims are not within one of the four statutory classes of invention and are therefore rejected under 35 U.S.C. §101.

13. Alternatively, and because the specification is not read into the claims (because applicant always has a chance to amend the claims), and because the Examiner has determined that the terms “module,” “database,” and “system” have not been lexicographically defined by Applicants, the Examiner notes that using the broadest reasonable interpretation of “module,” “database,” and “system” (definitions of “module” and “database” noted in ¶ 22 l and ¶ 22 m of the Final Office action mailed on 16 March 2009 (Paper No. 20090304), and definition of “system” noted below), the claimed system, modules, and databases are interpreted as software *per se*. Because the broadest reasonable interpretation of “module,” “database,” and “system” includes software *per se*, in addition to Applicants express statement that the modules and

² 35 U.S.C. §101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent; namely, processes, machines, manufactures, and composition of matter. The latter three categories define “things” (or products) while the first category defines “actions” (*i.e.*, inventions that consist of a series of steps or acts to be performed).

databases are software only, the claims are not within one of the four statutory classes of invention and are therefore rejected under 35 U.S.C. §101.

Claim Rejections - 35 USC §103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Merriman et al. (U.S. 5,948,061 A) ("Merriman"), in view of Abgrall (U.S. 6,373,498 B1) ("Abgrall").

Regarding Claims 1 and 6

16. Merriman discloses a method of operating a content delivery system for distributing advertising content ("methods and apparatuses for targeting the delivery of advertisements") to users of personal computers (user's browser **16**), (figs. 1 and 2 with associated text), the method comprising:

collecting identification data ("user identification") from a network of personal computers ("the user is a computer on an IP Network" and "users"), wherein the personal computers are configured to periodically receive and store advertising content and display the

advertising content (c. 3, l. 24 – c. 4, l. 55; and figure 1 with associated text; see also discussion of “Advertising Server Processes **19**,” c. 5-7);

receiving advertising content (via “advertising process”) from an advertiser (c. 4, l. 20+; and fig. 1 with associated text);

receiving preference data from the personal computers (“the ad server **19** obtains from a database all of the information known about the user including... the particular types of advertisements that the user has clicked on by SIC or other appropriate coding...”) (c. 5, l. 50-63; see also fig. 3A for depiction of user profile stored in database);

selecting the advertisement content that is to be distributed to the personal computers based upon at least one of received preference data from the personal computers and predetermined conditions related to advertisement distribution (“the advertisement that is to be selected for viewing is the one that has a matched profile”) (c. 6, l. 48-60; see also c. 5, l. 64 – c. 6, l. 47 for discussion of fig. 3B and targeted advertisements);

formatting the advertising content for storage (“advertisement... are stored within ad server process **19**”) and display in the personal computer (c. 4, l. 20+);

distributing, using the collected identification data, the formatted advertising content to the personal computers (“upon receiving”) (c. 3, l. 52 and c. 4, l. 25-30); and

wherein the personal computers are configured to periodically receive and store advertising content and display the advertising content (c. 4, l. 20+; c. 3, l. 52; and c. 4, l. 25-30).

17. Merriman does not specifically disclose the following limitations:

wherein the personal computers are configured to display the advertising content *while or before bootloading a user selected application environment*.

18. Abgrall, however, teaches the limitations:

wherein personal computers (user computer **40₁** through user computer **40_N**) are configured to periodically receive and store advertising content and display the advertising content while or before bootloading a user selected application environment (“content that was previously downloaded... is then displayed, **prior to loading and/or execution of the operating system**”) (c. 3, l. 54 – c. 4, l. 31; and c. 9, l. 25+).

19. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the personal computers of Merriman to include the functionality of periodically receiving and storing advertising content and storing advertising content and displaying the advertising content while or before bootloading a user selected application environment, as disclosed by Abgrall. One would have been motivated to do so because “the boot-up and shut-down images as displayed by the OS are normally not useful to the user and merely contain routine messages. Since the time to boot up and shut down is sufficiently long for the system to display more informative images, it is desirable to be able to display images other than the standard logos of the operating system,” such as advertisements (Abgrall, “Background”; and c. 3, l. 54 – c. 4, l. 31).

Regarding Claims 2, 3, 7, and 8

20. The combination of Merriman and Abgrall discloses the limitations of claims 1 and 6, as described above, and further discloses the limitations:

wherein the identification data comprises a unique identifier/internet protocol address (“IP Address”) that is associated with one of the personal computers (“the user is a computer on an IP Network” and “users”) (Merriman: c. 3, l. 24 – c. 4, l. 55).

Regarding Claims 5 and 10

21. The combination of Merriman and Abgrall discloses the limitations of claims 1 and 6, as described above, and further discloses the limitations:

associating a fee with data representative of the advertiser (Merriman: c. 2, l. 59+); and
storing the fee in a storage device (Merriman: c. 2, l. 59+).

Claim Interpretation

22. The Examiner maintains the positions recited in ¶¶ 14-23 of the Final Office action mailed on 16 March 2009 (Paper No. 20090304).

23. The Examiner hereby adopts the following definitions under the broadest reasonable interpretation standard. In accordance with *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997), the Examiner points to these other sources to support his interpretation of the claims.³ Additionally, these definitions are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

³ While most definitions are cited because these terms are found in the claims, the Examiner may have provided additional definitions to help interpret words, phrases, or concepts found in the definitions themselves or in the prior art.

component “n. 2. An individual modular software routine that has been compiled and dynamically linked, and is ready to use with other components or programs.” Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997;

element “n. 1. Any stand-alone item within a broader context. For example, a data element is an item of data with the characteristics or properties of a larger set.” Id.; and

system “n. Any collection of component elements that work together to perform a task. Examples are a hardware system consisting of a microprocessor, its allied chips and circuitry, input and output devices, and peripheral devices; an operating system consisting of a set of programs and data files; or a database management system used to process specific kinds of information.” Id.

Response to Arguments

35 U.S.C. §101 Rejection

24. Applicants argue:

Claim 6 is directed to a content delivery system for distributing advertising data to a network of personal computers...comprising: an identification database...an advertisement database...a collection module...a formatting module...and...a control module... The content delivery system is comprised of plurality of machines or physical structures that perform described functions and is clearly statutory.

See p. 5, 09 Jun Remarks (emphasis in original).

25. The Examiner respectfully disagrees.

26. First, the scope of claim 6 is limited to a “content delivery system.” The claimed system is “for distributing advertising data to a network of personal computers” (emphasis added). The *intended use* of the system is to distribute advertising data to a network of personal computers.

Nevertheless, the “network of personal computers” is outside the scope of claim 6. The “network of personal computers” is not positively recited as a component of the claimed “content delivery system.” Therefore, the Examiner has concluded that the recitation of “a network of personal computers,” in the preamble of claim 6, does not cause the claimed “content delivery system” to be statutory subject matter.

27. Second, as noted above, a system can be a collection of software routines. Software routines are not “machines or physical structures” as alleged by Applicants. Accordingly, the content delivery system is interpreted as software *per se* and thus not patentable subject matter under 35 U.S.C. §101.

28. Applicants argue:

Applicant respectfully submits that independent claim 6 is clearly directed to a “machine or physical structure”. As set forth in MPEP § 2106.01: “When a computer program is recited in conjunction with a physical structure...USPTO personnel should treat the claim as a product claim.”

See p. 5, 09 Jun Remarks (emphasis in original).

29. The Examiner recognizes the procedure outlined in MPEP §2106.01 and must agree to its use. Nevertheless, claim 6 *does not* positively recite a physical structure that is a component of the claimed “content delivery system.” If Applicants were to amend claim 6 to positively recite one undisputable item of physical structure that is a component of the claimed system, the Examiner would withdraw the rejection to claim 6 under 35 U.S.C. §101.

30. Applicants argue:

As set forth in MPEP § 2106.IVB: “For example, a claimed invention may be a combination of devices that appear to be directed to a machine and one or more steps of functions performed by the machine...an apparatus claim with process steps is not classified as a hybrid claim, instead, it is simply an apparatus claim including functional limitations...”

See p. 5, 09 Jun Remarks.

31. Again, the Examiner recognizes the procedure outlined in MPEP §2106.IVB and must agree to its use. Nevertheless, claim 6 does not appear to be directed to a machine. Accordingly, this argument is not persuasive.

32. Applicants argue:

Applicant respectfully submits that the MPEP makes clear that Applicant's content delivery system for distributing advertising data through a network of personal computers including various databases and modules clearly defines a physical structure or machine and is not a "data structure" representing descriptive materials *per se* or a computer program representing computer listings *per se* as indicated by the Examiner.

See p. 5, 09 Jun Remarks (emphasis in original).

33. The Examiner respectfully disagrees. It appears that Applicants are relying on the recitation of "system" and "network of personal computers" in the preamble of claim 6 to "clearly define a physical structure or machine." As noted above, a system can be interpreted as a collection of software routines and a "network of personal computers" is not even positively recited as a component of the system of claim 6.

Prior Art

34. Applicants argue:

As recognized by the Examiner, on page 5 of the Office Action, Merriman does not disclose the following limitations: "wherein the personal computers are configured to periodically receive and store advertising content and display tile advertising content while or before bootloading a user selected application environment."

See p. 6, 09 Jun Remarks.

35. The Examiner respectfully disagrees. It appears that Applicants are arguing that Merriman does not disclose any of the elements from the limitation “wherein the personal computers are configured to periodically receive and store advertising content and display tile advertising content while or before bootloading a user selected application environment.” This is not true because Merriman does disclose wherein the personal computers are configured to periodically receive, store, and display advertising content. Additionally, Applicants argue “The Examiner asserts that Abgrall teaches these limitations. Applicant respectfully disagrees with the Examiner and believes that the Examiner has misconstrued the teachings of Abgrall. Abgrall does not teach or suggest these limitations.” See p. 6, 09 Jun Remarks. The Examiner acknowledges Applicants’ belief.

36. Applicants argue:

...neither Merriman nor Abgrall teach or suggest:...receiving *preference data* from personal computers and *selecting advertisement content* that is to be distributed to the personal computers based upon at least one of *received preference data* from the personal computers and *pre-determined conditions related to advertisement distribution*.

See p. 6, 09 Jun Remarks.

37. The Examiner respectfully disagrees. Merriman’s advertisement server receives and stores data indicating advertisements that users have “clicked on” by storing the SIC codes related to those ads (*i.e.*, preference data) in a user profile; and receives and stores other data such as the time zone, the location, and the IP address of the user (*i.e.*, pre-determined conditions related to advertisement distribution) in the user profile (see fig. 3A). Based on this user profile additional ads are sent to the user.

38. Applicants argue “There is no particular teaching or suggestion in Abgrall of personal computers that periodically receive and store advertising content and display the advertising content while or before bootloading a user selected application environment.” See p. 7, 09 Jun Remarks.

39. The Examiner respectfully disagrees. The Examiner respectfully disagrees. Abgrall discloses “the initial payload is stored... in ROM BIOS” (c. 3, l. 59-61) (emphasis added); “the initial payload is launched from ROM BIOS and displayed on the screen after the Power On Self Test (POST) but prior to the booting, loading and/or execution of the OS” (c. 3, l. 62-65) (emphasis added); and “Once copied, the payload executes after POST but prior to operation of the OS, and may display graphics, advertisements, animation... JPEG... formatted material on the screen” (c. 4, l. 4-9) (emphasis added).

40. Applicants argue:

Moreover, Abgrall does not teach or suggest *a control module to: receive preference data from personal computers and select advertisement content* that is to be distributed to the network of personal computers *based upon at least one of received preference data from the personal computers and pre-determined conditions related to advertisement distribution*. Furthermore, Merriman does not teach or suggest these limitations.

See p. 8, 09 Jun Remarks (emphasis in original).

41. The Examiner respectfully disagrees. First, the Examiner is not relying on Abgrall to teach these limitations so the argument against Abgrall is moot. Second, as discussed above, Merriman does disclose these limitations.

Conclusion

42. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to Jacob C. Coppola whose telephone number is (571) 270-3922. The Examiner can normally be reached on Monday-Friday, 9:00 a.m. - 5:00 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached at (571) 272-6779.
43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

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September 1, 2009

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